

Use Attainability Analysis

for

WBID 1593 Brushy Creek

Submitted by

Missouri Department of Natural Resources Staff

To

Missouri Department of Natural Resources
Water Protection Program

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet A - Water Body Identification

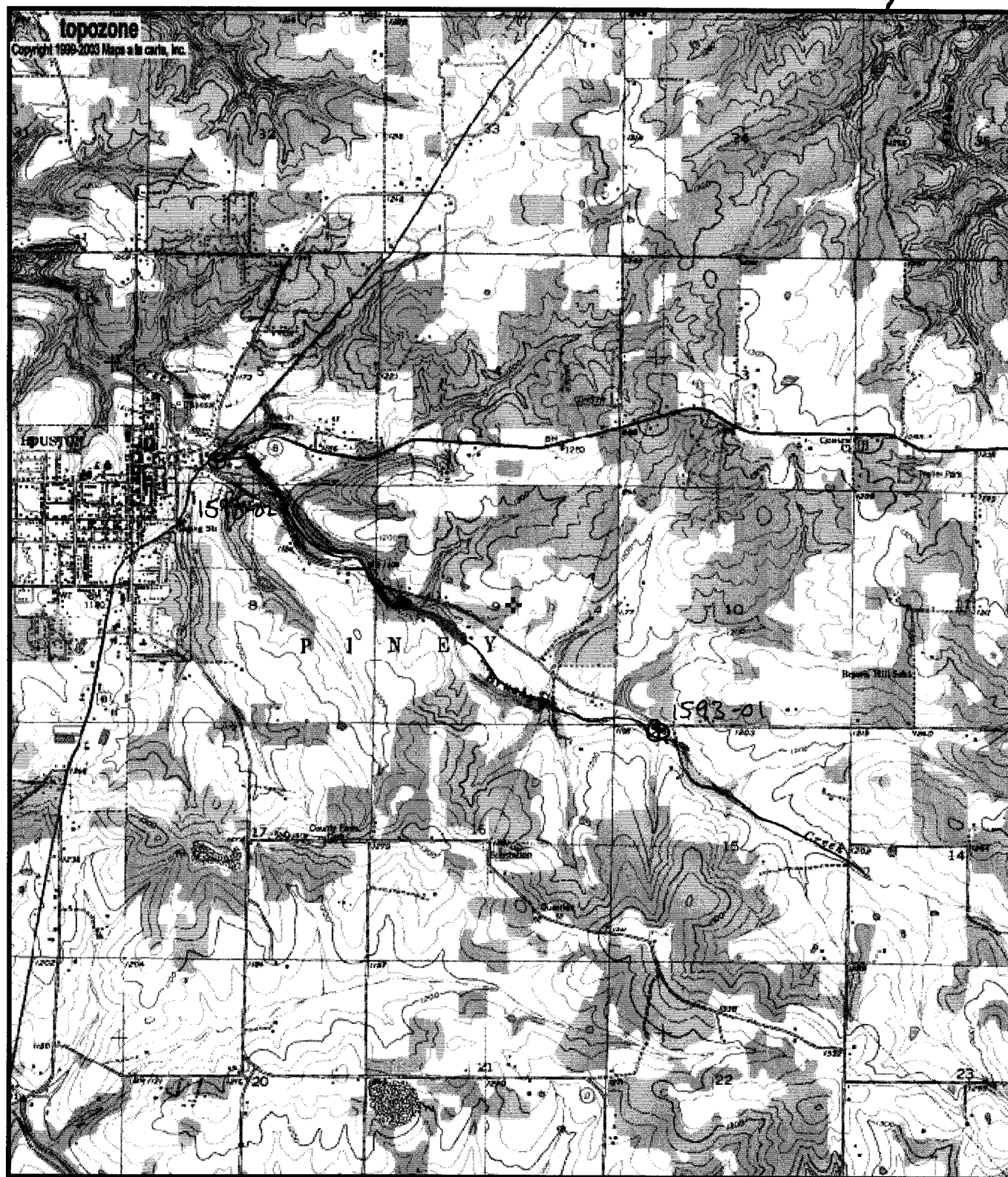
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JUL 12 2005
WATER PROTECTION PROGRAM

| | | | |
|--|---------------------------|----------|----------|
| Water Body Name (from USGS 7.5' quad): | Brushy Creek | | |
| 8-digit HUC: | 10290202 | | |
| Missouri WBID #: | 1593 | | |
| County: | Texas | | |
| Upstream Legal Description: | Sec 14 T30 N R9W | | |
| Downstream Legal Description: | Sec 5 T30 N R9W | | |
| Upstream Coordinates: | 37.30218 | 91.90255 | 17.3 ft |
| Downstream Coordinates: | 37.32706 | 91.95133 | 19.3 ft. |
| Discharger Facility Name(s): | | | |
| Discharger Permit Number(s): | | | |
| Number of Sites Evaluated: | (3) | | |
| Name of Surveyor and Telephone Number: | Dave Dowdy (660) 385-7996 | | |
| Organization: | Mo. DNR | | |
| Position: | Soil Scientist III | | |

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Daniel W. Dowdy Date: 6-14-05

1593 - Brushy Cr.



0 0.6 1.2 1.8 2.4 3 km
0 0.4 0.8 1.2 1.6 2 mi

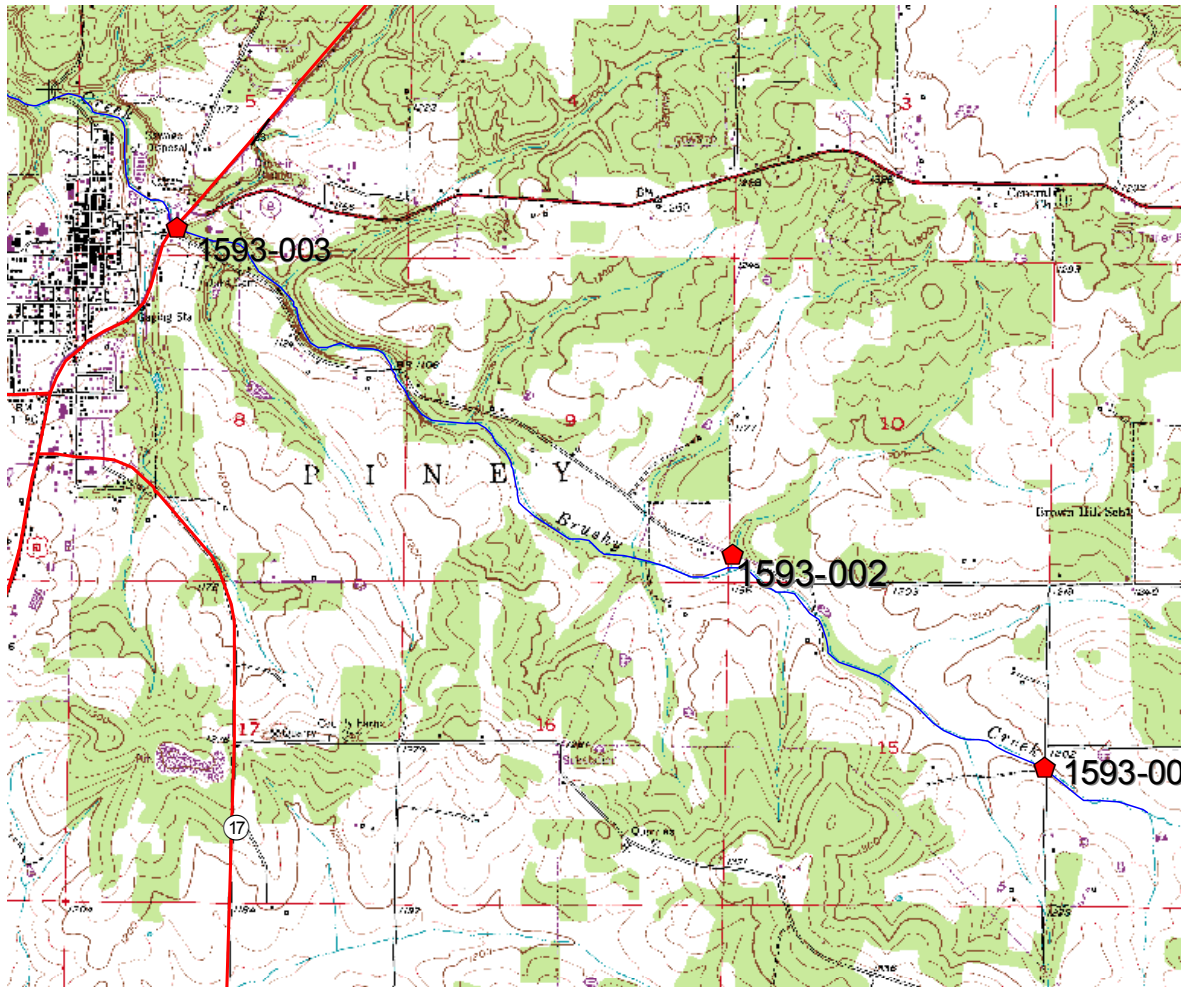
Map center is UTM 15 594976E 4130772N (WGS84/NAD83)

Houston quadrangle

Projection is UTM Zone 15 NAD83 Datum

M=1.207
G=0.65

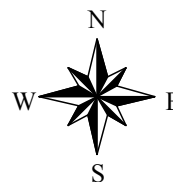
Brushy Creek - 1593, Texas County



Legend

- UAA sites
- Primary Highways
- Classified Streams

0 0.6 1.2 Miles



Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

| | | |
|---|-----------------------|---|
| Missouri WBID #: 1593-01 | | Site Location Description: Brushy Creek |
| Site GPS Coordinates: 37.30218 91.90255 | | |
| Date & Time: 6-14-05 3:30 pm. | | Facility Name: |
| Personnel: Dave Dowdy | | Permit Number: |
| Current Weather Conditions: Hot + Dry | | Weather Conditions for Past 7 days: Hot + Wet |
| Photo Ids: Upstream: 1593-01 U | Downstream: 1593-01 D | Other: 1543-01 E 1543-01 E 1543-01 E 1543-01 E |

Uses Observed*:

| | | | | |
|---------------------------------------|--------------------------------------|---------------------------------------|---|---------------------------------------|
| <input type="checkbox"/> Swimming | <input type="checkbox"/> Skin diving | <input type="checkbox"/> SCUBA diving | <input type="checkbox"/> Tubing | <input type="checkbox"/> Water skiing |
| <input type="checkbox"/> Wind surfing | <input type="checkbox"/> Kayaking | <input type="checkbox"/> Boating | <input type="checkbox"/> Wading | <input type="checkbox"/> Rafting |
| <input type="checkbox"/> Hunting | <input type="checkbox"/> Trapping | <input type="checkbox"/> Fishing | <input checked="" type="checkbox"/> None of the above | <input type="checkbox"/> Other: |

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

| | | | | |
|--|--------------------------------------|---|---|---|
| <input type="checkbox"/> City/county parks | <input type="checkbox"/> Playgrounds | <input type="checkbox"/> MDC conservation lands | <input type="checkbox"/> Urban areas | <input type="checkbox"/> Campgrounds |
| <input type="checkbox"/> Boating accesses | <input type="checkbox"/> State parks | <input type="checkbox"/> National forests | <input type="checkbox"/> Nature trails | <input type="checkbox"/> Stairs/walkway |
| <input type="checkbox"/> No trespass sign | <input type="checkbox"/> Fence | <input type="checkbox"/> Steep slopes | <input checked="" type="checkbox"/> Other: Cattle fence | |

Evidence of Human Use*:

| | | | | |
|--------------------------------------|--|--|--|--|
| <input type="checkbox"/> Roads | <input type="checkbox"/> Foot paths/prints | <input type="checkbox"/> Dock/platform | <input checked="" type="checkbox"/> Livestock Watering | <input type="checkbox"/> RV / ATV Tracks |
| <input type="checkbox"/> Rope swings | <input type="checkbox"/> Camping Sites | <input type="checkbox"/> Fire pit/ring | <input type="checkbox"/> NPDES Discharge | <input type="checkbox"/> Fishing Tackle |
| <input type="checkbox"/> Other: | | | | |

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

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Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

Page Two - WBID # 1593 : 01

Stream Morphology:

Upstream View Physical Dimensions:

| | | | | |
|--|---------------|---|-----------------------------------|----------------------|
| <input type="checkbox"/> Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input type="checkbox"/> Run | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input checked="" type="checkbox"/> Pool | Width (ft): 8 | Length (ft): 15 | Avg. Depth (ft): .5 | Max. Depth (ft): 1.4 |
| <input checked="" type="checkbox"/> Flow | Present? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Estimated (ft ³ /sec): | |

Downstream View Physical Dimensions:

| | | | | |
|--|---------------|---|-----------------------------------|----------------------|
| <input type="checkbox"/> Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input type="checkbox"/> Run | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input checked="" type="checkbox"/> Pool | Width (ft): 8 | Length (ft): 15 | Avg. Depth (ft): .5 | Max. Depth (ft): 1.0 |
| <input checked="" type="checkbox"/> Flow | Present? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Estimated (ft ³ /sec): | |

Substrate*: (These values should add up to 100%.)

| | | | | | | | | | | | |
|----------|----|----------|----|--------|--|--------|--|------------|--|-----------|--|
| % Cobble | 90 | % Gravel | 10 | % Sand | | % Silt | | % Mud/Clay | | % Bedrock | |
|----------|----|----------|----|--------|--|--------|--|------------|--|-----------|--|

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

| |
|-------------------------|
| Hydro plants in channel |
|-------------------------|

Water Characteristics*: (Mark all that apply.)

| | | | | | |
|------------------|---|---------------------------------|---|--|---------------------------------|
| Odor: | <input type="checkbox"/> Sewage | <input type="checkbox"/> Musky | <input type="checkbox"/> Chemical | <input checked="" type="checkbox"/> None | <input type="checkbox"/> Other: |
| Color: | <input checked="" type="checkbox"/> Clear | <input type="checkbox"/> Green | <input type="checkbox"/> Gray | <input type="checkbox"/> Milky | <input type="checkbox"/> Other: |
| Bottom Deposit: | <input type="checkbox"/> Sludge | <input type="checkbox"/> Solids | <input type="checkbox"/> Fine sediments | <input checked="" type="checkbox"/> None | <input type="checkbox"/> Other: |
| Surface Deposit: | <input type="checkbox"/> Oil | <input type="checkbox"/> Scum | <input type="checkbox"/> Foam | <input checked="" type="checkbox"/> None | <input type="checkbox"/> Other: |

Comments: Please attach additional comments (including information from interviews) to this form.

*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Dan W. Dwyer Date: 6-14-05
Organization: Mo DNR Position: Soil Scientist III

1593_001_US



1593_001_DS



Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

| | | |
|--|------------------------------|--|
| Missouri WBID #: <u>1593-02</u> | | Site Location Description: <u>Brushy Creek</u> |
| Site GPS Coordinates: <u>37.31202 91.92008</u> | | |
| Date & Time: <u>6-14-05 3 pm.</u> | | Facility Name: |
| Personnel: <u>Dave Dowdy</u> | | Permit Number: |
| Current Weather Conditions: <u>Hot + Dry</u> | | Weather Conditions for Past 7 days: <u>Hot + Wet</u> |
| Photo Ids: Upstream: <u>1593-02 U</u> | Downstream: <u>1593-02 D</u> | Other: <u>1593-02a E 1593-02b E (cont in creek)</u> |

Uses Observed*:

| | | | | |
|---------------------------------------|--------------------------------------|---------------------------------------|--|---|
| <input type="checkbox"/> Swimming | <input type="checkbox"/> Skin diving | <input type="checkbox"/> SCUBA diving | <input type="checkbox"/> Tubing | <input type="checkbox"/> Water skiing |
| <input type="checkbox"/> Wind surfing | <input type="checkbox"/> Kayaking | <input type="checkbox"/> Boating | <input type="checkbox"/> Wading | <input type="checkbox"/> Rafting |
| <input type="checkbox"/> Hunting | <input type="checkbox"/> Trapping | <input type="checkbox"/> Fishing | <input type="checkbox"/> None of the above | <input checked="" type="checkbox"/> Other: <u>Cows wading</u> |

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

| | | | | |
|--|---|---|--|---|
| <input type="checkbox"/> City/county parks | <input type="checkbox"/> Playgrounds | <input type="checkbox"/> MDC conservation lands | <input type="checkbox"/> Urban areas | <input type="checkbox"/> Campgrounds |
| <input type="checkbox"/> Boating accesses | <input type="checkbox"/> State parks | <input type="checkbox"/> National forests | <input type="checkbox"/> Nature trails | <input type="checkbox"/> Stairs/walkway |
| <input type="checkbox"/> No trespass sign | <input checked="" type="checkbox"/> Fence | <input type="checkbox"/> Steep slopes | <input type="checkbox"/> Other: | |

Evidence of Human Use*:

| | | | | |
|--|--|--|--|--|
| <input type="checkbox"/> Roads | <input type="checkbox"/> Foot paths/prints | <input type="checkbox"/> Dock/platform | <input checked="" type="checkbox"/> Livestock Watering | <input type="checkbox"/> RV / ATV Tracks |
| <input type="checkbox"/> Rope swings | <input type="checkbox"/> Camping Sites | <input type="checkbox"/> Fire pit/ring | <input type="checkbox"/> NPDES Discharge | <input type="checkbox"/> Fishing Tackle |
| <input checked="" type="checkbox"/> Other: <u>Livestock fencing / cattle fence, Livestock in creek</u> | | | | |

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

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Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

Page Two - WBID # 1513: 07

Stream Morphology:

Upstream View Physical Dimensions:

| | | | | |
|--|----------------|---|-----------------------------------|----------------------|
| <input type="checkbox"/> Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input type="checkbox"/> Run | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input checked="" type="checkbox"/> Pool | Width (ft): 10 | Length (ft): 25 | Avg. Depth (ft): 1.0 | Max. Depth (ft): 1.0 |
| <input checked="" type="checkbox"/> Flow | Present? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Estimated (ft ³ /sec): | |

Downstream View Physical Dimensions: Dry

| | | | | |
|--|-------------|---|-----------------------------------|------------------|
| <input type="checkbox"/> Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input type="checkbox"/> Run | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input type="checkbox"/> Pool | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input checked="" type="checkbox"/> Flow | Present? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Estimated (ft ³ /sec): | |

Substrate*: (These values should add up to 100%.)

| | | | | | |
|------------|-------------|----------|--------|------------|-----------|
| 5 % Cobble | 90 % Gravel | 5 % Sand | % Silt | % Mud/Clay | % Bedrock |
|------------|-------------|----------|--------|------------|-----------|

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

| |
|--------------------------|
| Hydric plants in channel |
|--------------------------|

Water Characteristics*: (Mark all that apply.)

| | | | | | |
|------------------|---|---------------------------------|---|--|--|
| Odor: | <input type="checkbox"/> Sewage | <input type="checkbox"/> Musky | <input type="checkbox"/> Chemical | <input checked="" type="checkbox"/> None | <input type="checkbox"/> Other: |
| Color: | <input checked="" type="checkbox"/> Clear | <input type="checkbox"/> Green | <input type="checkbox"/> Gray | <input type="checkbox"/> Milky | <input type="checkbox"/> Other: |
| Bottom Deposit: | <input type="checkbox"/> Sludge | <input type="checkbox"/> Solids | <input type="checkbox"/> Fine sediments | <input type="checkbox"/> None | <input checked="" type="checkbox"/> Other: <u>organs</u> |
| Surface Deposit: | <input type="checkbox"/> Oil | <input type="checkbox"/> Scum | <input type="checkbox"/> Foam | <input checked="" type="checkbox"/> None | <input type="checkbox"/> Other: |

Comments: Please attach additional comments (including information from interviews) to this form.

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I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: David W. Dancy Date: 6-14-05

Organization: Mo DNR Position: Soil Scientist III

1593_002_US



1593_002_DS



1593_002



1593_002



Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

| | |
|--|--|
| Missouri WBID #: <u>1593-03</u> | Site Location Description: <u>Brushy Creek</u> |
| Site GPS Coordinates: <u>37.32706 91.95133</u> | |
| Date & Time: <u>6-14-05 2:40 pm.</u> | Facility Name: |
| Personnel: <u>Dave Dowdy</u> | Permit Number: |
| Current Weather Conditions: <u>Hot + Dry</u> | Weather Conditions for Past 7 days: <u>Hot + Wet</u> |
| Photo Ids: Upstream: <u>1593-03 U</u> | Downstream: <u>1593-03 D</u> Other: |

Uses Observed*:

| | | | | |
|---------------------------------------|--------------------------------------|---------------------------------------|---|---------------------------------------|
| <input type="checkbox"/> Swimming | <input type="checkbox"/> Skin diving | <input type="checkbox"/> SCUBA diving | <input type="checkbox"/> Tubing | <input type="checkbox"/> Water skiing |
| <input type="checkbox"/> Wind surfing | <input type="checkbox"/> Kayaking | <input type="checkbox"/> Boating | <input type="checkbox"/> Wading | <input type="checkbox"/> Rafting |
| <input type="checkbox"/> Hunting | <input type="checkbox"/> Trapping | <input type="checkbox"/> Fishing | <input checked="" type="checkbox"/> None of the above | <input type="checkbox"/> Other: |

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

| | | | | |
|--|--------------------------------------|---|---|---|
| <input type="checkbox"/> City/county parks | <input type="checkbox"/> Playgrounds | <input type="checkbox"/> MDC conservation lands | <input checked="" type="checkbox"/> Urban areas | <input type="checkbox"/> Campgrounds |
| <input type="checkbox"/> Boating accesses | <input type="checkbox"/> State parks | <input type="checkbox"/> National forests | <input type="checkbox"/> Nature trails | <input type="checkbox"/> Stairs/walkway |
| <input type="checkbox"/> No trespass sign | <input type="checkbox"/> Fence | <input type="checkbox"/> Steep slopes | <input type="checkbox"/> Other: | |

Evidence of Human Use*:

| | | | | |
|--|--|--|---|--|
| <input type="checkbox"/> Roads | <input type="checkbox"/> Foot paths/prints | <input type="checkbox"/> Dock/platform | <input type="checkbox"/> Livestock Watering | <input type="checkbox"/> RV / ATV Tracks |
| <input type="checkbox"/> Rope swings | <input type="checkbox"/> Camping Sites | <input type="checkbox"/> Fire pit/ring | <input type="checkbox"/> NPDES Discharge | <input type="checkbox"/> Fishing Tackle |
| <input type="checkbox"/> Other: <u>N/A</u> | | | | |

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

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Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

Page Two - WBID # 1513:03

Stream Morphology:

Upstream View Physical Dimensions:

| | | | | |
|--|--|-----------------------------------|-----------------------------|-------------------------------|
| <input type="checkbox"/> Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input type="checkbox"/> Run | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input checked="" type="checkbox"/> Pool | Width (ft): <u>30</u> | Length (ft): <u>80</u> | Avg. Depth (ft): <u>1.0</u> | Max. Depth (ft): <u>2 ft.</u> |
| <input checked="" type="checkbox"/> Flow | Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Estimated (ft ³ /sec): | | |

Downstream View Physical Dimensions:

| | | | | |
|--|--|-----------------------------------|-----------------------------|--------------------------------|
| <input type="checkbox"/> Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input type="checkbox"/> Run | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input checked="" type="checkbox"/> Pool | Width (ft): <u>6</u> | Length (ft): <u>30</u> | Avg. Depth (ft): <u>.25</u> | Max. Depth (ft): <u>.5 ft.</u> |
| <input checked="" type="checkbox"/> Flow | Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Estimated (ft ³ /sec): | | |

Substrate*: (These values should add up to 100%.)

| | | | | | |
|-------------------|--------------------|------------------|--------|------------|-----------|
| <u>5</u> % Cobble | <u>80</u> % Gravel | <u>15</u> % Sand | % Silt | % Mud/Clay | % Bedrock |
|-------------------|--------------------|------------------|--------|------------|-----------|

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

| |
|---|
| <u>Algae on surface downstream from Hwy 63 bridge</u> |
|---|

Water Characteristics*: (Mark all that apply.)

| | | | | | |
|------------------|---|--|---|--|---------------------------------|
| Odor: | <input type="checkbox"/> Sewage | <input type="checkbox"/> Musky | <input type="checkbox"/> Chemical | <input checked="" type="checkbox"/> None | <input type="checkbox"/> Other: |
| Color: | <input checked="" type="checkbox"/> Clear | <input type="checkbox"/> Green | <input type="checkbox"/> Gray | <input type="checkbox"/> Milky | <input type="checkbox"/> Other: |
| Bottom Deposit: | <input type="checkbox"/> Sludge | <input type="checkbox"/> Solids | <input type="checkbox"/> Fine sediments | <input checked="" type="checkbox"/> None | <input type="checkbox"/> Other: |
| Surface Deposit: | <input type="checkbox"/> Oil | <input checked="" type="checkbox"/> Scum <u>slight</u> | <input type="checkbox"/> Foam | <input type="checkbox"/> None | <input type="checkbox"/> Other: |

Comments: Please attach additional comments (including information from interviews) to this form.

Minnows, small snails observed in creek

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I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Dave W. Dwyer Date: 6-14-05

Organization: MO DNR Position: Soil Scientist III

1593_003_US



1593_003_DS

